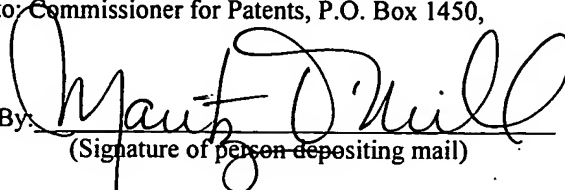


PCT

**EXPRESS MAIL CERTIFICATE: EL667329554US**

I hereby certify that this correspondence listed below is being deposited with the United States Postal Service on the date set forth below as Express Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Signature  
and Deposit: November 8, 2005

By:   
(Signature of person depositing mail)  
MARITZA O'NEILL

**CERTIFICATE OF MAILING PURSUANT TO 37 C.F.R. 1.10**

In re application of	:	Paul S. Keim <i>et al.</i>
Serial No.	:	10/519,206 ✓
Date of Filing	:	December 21, 2005
Title	:	<i>A HIGH RESOLUTION TYPING SYSTEM FOR PATHOGENIC BORRELIA</i>
Art Unit	:	To be assigned
Examiner	:	To be assigned
USPTO Customer No.	:	26707
Attorney Docket No.	:	112624.00082

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Type of Filing:**

1. Response to Notification to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures;
2. Copy of Notification to Comply;
3. Sequence Listing in computer readable form;
4. Paper copy of Sequence Listing;
5. Verification Statement; and
6. Return postcard.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Paul S. Keim <i>et al.</i>
Serial No.	:	10/519,206
Date of Filing	:	December 21, 2005
Title	:	<i>A HIGH RESOLUTION TYPING SYSTEM FOR PATHOGENIC BORRELLIA</i>
Art Unit	:	To be assigned
Examiner	:	To be assigned
USPTO Customer No.	:	26707
Attorney Docket No.	:	112624.00082

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**RESPONSE TO NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR  
PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID  
SEQUENCE DISCLOSURES**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

Dear Sir:

In response to the Notice to Comply mailed September 26, 2005 in connection with the above patent application, Applicants hereby submit the following:

1. Copy of Notification to Comply;
2. Sequence Listing in computer readable form; .
3. Paper copy of Sequence Listing;
4. Verification Statement; and
5. Return postcard.

Further, in response to the request for additional claim fees, Applicants' counsel spoke with Examiner India Evans who indicated that after a review of the claims submitted with the application, no additional fees are due.

No fees are believed due with this filing. However, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **17-0055**.

Application Serial No.: 10/519,206

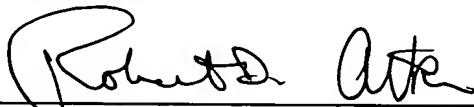
Keim *et al.*

Submission of Sequence Listing in Response to Notification to Comply with Requirements

All formalities are now complete and Applicants request that this application proceed to examination.

Respectfully submitted,

**QUARLES & BRADY STREICH LANG, LLP**

By: 

Robert D. Atkins

Reg. No. 34,288

**Address all correspondence to:**

Robert D. Atkins

Quarles & Brady Streich Lang LLP

One Renaissance Square

Two North Central Avenue

Phoenix, AZ 85004

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Facsimile: 602-229-5690

Email: rda@quarles.com



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/519,206	Paul S Keim	1126624.00082

INTERNATIONAL APPLICATION NO.
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PCT/US03/21153

LA. FILING DATE	PRIORITY DATE
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07/02/2003

07/02/2002

Quarles & Brady  
 One Renaissance Square  
 Two North Central Avenue  
 Phoenix, AZ 85004

CONFIRMATION NO. 5389

371 FORMALITIES LETTER

\*OC000000016911066\*

\*OC000000016911066\*

Date Mailed: 09/26/2005

### NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES.

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of **\$200** as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

#### SUMMARY OF FEES DUE:

Total additional fees required for this application is **\$200** for a Small Entity:

- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- Total additional claim fee(s) for this application is **\$ 200**
  - \$100 for 5 independent claims over 3.
  - \$100 for 4 total claims over 20.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patent Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

INDIA L EVANS

Telephone: (703) 308-9140 EXT 212

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/519,206	PCT/US03/21153	1126624.00082

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Paul S. Keim *et al.*  
Serial No. : 10/519,206  
Date of Filing : December 21, 2005  
Title : *A HIGH RESOLUTION TYPING SYSTEM FOR  
PATHOGENIC BORRELLIA*  
Art Unit : To be assigned  
Examiner : To be assigned  
USPTO Customer No. : 26707  
Attorney Docket No. : 112624.00082

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**VERIFICATION STATEMENT**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

Dear Sir:

The undersigned, an attorney registered to practice before the U.S. Patent and Trademark Office and representing the applicants in the above-identified patent application does hereby state and affirm that the content of the printed sequence listing and the content of the sequence listing attached hereto in computer readable form are one and the same.

Dated in Phoenix, Arizona, this 8 day of November 2005.

Respectfully submitted,  
**QUARLES & BRADY STREICH LANG, LLP**

By: \_\_\_\_\_

Robert D. Atkins  
Reg. No. 34,288

**Address all correspondence to:**

Robert D. Atkins  
Quarles & Brady Streich Lang LLP  
One Renaissance Square  
Two North Central Avenue  
Phoenix, AZ 85004  
Telephone: 602-229-5311  
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